

## CHAPTER II : MINISTRY OF DEFENCE

### 2.1 Functioning of Directorate General Married Accommodation Project (MAP)

**DG MAP was created as a special organisation, to construct deficit married accommodation for the defence services personnel in an expeditious and time bound manner. Audit of the Directorate revealed that only 80,692 Dwelling Units (DUs) were constructed up to March 2016 against a target of 1,98,881 DUs, which were to be constructed in four phases of four years each from 2002 onwards. Incorrect prioritisation of stations, inaccurate assessment of deficiency and construction of accommodation beyond authorisation accentuated the impact of shortfall.**

#### 2.1.1 Introduction

**2.1.1.1** Works Projects for Defence services are generally entrusted to Military Engineer Services (MES) which plans and executes the same following Defence Works Procedure 1986/2007. However, with the existing role and responsibilities, MES had a limited capacity to undertake new construction of married accommodation only up to ₹500 crore per year, which was far too less to meet the huge shortfall of accommodation for the Service personnel. Considering the deficiency in the availability and the limited construction capacity of MES, it was felt by Ministry of Defence (MoD) that MES would take more than 30 years to make up the shortfall. Hence, in order to provide the Dwelling Units (DU) and make up the deficiencies in a time bound manner, MoD issued a sanction in May 2002 for setting up a Directorate General for Married Accommodation Project (DG MAP), to specifically undertake the construction of DUs for the Armed Forces. The DG MAP organisation was created through re-location, re-alignment and re-distribution of MES resources. Based on the assessment by the Service Headquarters, the requirement of accommodation was approved by Cabinet Committee on Security (CCS) in September 2002 as 1,98,881 DUs, after excluding 48,119 DUs in some areas of J&K and North East. The allotment and expenditure for the last 10 years (up to March 2016) is shown below:

**Table-11: Allotment and expenditure for the last 10 years (up to March 2016)**

(₹ in crore)

Year	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Total
<b>Allotment</b>	1391	1504	913	455	1213	1283	1325	1372	1969	2744	14169
<b>Expenditure</b>	1390	1482	901	457	1248	1168	1308	1326	1924	2737	13941

### 2.1.1.2 Structure of DG MAP, role and responsibilities

Directorate General Married Accommodation Project (DG MAP), with Headquarters in Delhi and as a part of Engineer- in- Chief's branch (E-in -C's) in Army HQ, was headed by an Additional Director General of Works. Technical officers were provided by internal adjustment with the E-in-C's branch/ MES. The administrative control over the functioning of DGMAP was exercised through the following three empowered Committees constituted by the MoD in May 2002.

- (a) Apex Steering Committee (ASC), headed by Defence Secretary.
- (b) Vice Chief's Committee (VCC), headed by Vice Chief of respective Services.
- (c) Command Committee (CC), headed by Commandant (of the rank of Lt. General or equivalent).

The acceptance of necessity, based on the requirements projected by Service HQ, for the number of DUs to be constructed at each station and allotment of works for execution was the role of ASC. This Committee was also responsible for appointment of Consultants and monitoring of the progress of work. Administrative Approvals for the works based on the Detailed Project Reports (DPR) prepared by concerned executing agencies, was issued by these empowered committees within the following delegated financial powers:

**Table -12: Delegated Financial Powers of the Committees**

S No	Competent Financial Committee	Delegated Powers
1.	Apex Steering Committee (ASC)	Full powers
2.	Vice Chief's Committee (VCC)	Up to ₹50 crore
3.	Command Committee (CC)	Up to ₹20 crore

Construction of the DUs in MAP was planned in 2002, four phases, with each phase to be completed in four years. While the planning was further reviewed and priority of the stations reassessed, based on the inputs from Command Headquarters, we observed that the subsequent phases could not be taken up within the four years time frame fixed for each Phase. **Table 13** below shows the distribution of DUs separately for Phase I and II and by clubbing Phases III and IV, as finalised in September 2010.

**Table-13: Phase wise distribution of DUs**

SERVICE	PHASE-I	PHASE-II	PHASE-III & IV	TOTAL
ARMY	47,383	58,915	69,767	1,76,065
NAVY	2,687	3,994	-	6,681
AIR FORCE	7,805	7,067	1,263	16,135
<b>TOTAL</b>	<b>57,875</b>	<b>69,976</b>	<b>71,030</b>	<b>1,98,881</b>

In execution of MAP works, Station Commanders perform a key role. They are responsible to review the Zonal plans, correctly compute the deficiency of married accommodation at the station, identify appropriate land and plan housing in a holistic manner. The Station Commanders are also required to closely associate themselves in planning, execution and taking over of DUs after completion.

### **2.1.1.3 MAP Works Procedure**

DGMAP was established to complete and execute the work in a time bound manner, therefore a separate Works Procedure for MAP was evolved for smooth and timely completion of the project. The MAP Works procedure-2003 enumerated the procedures for projection, planning, sanction, contract action, execution, material and financial management of work services as a decentralized system of decision making. DG MAP was to engage Project Consultancy with the approval of ASC after open competitive tendering with pre-qualification criteria. The project consultant was to carry out the survey, site investigation, preparation of design, structural/architectural drawings, preparation of bill of quantities, cost estimates, tender documents and evaluation of quoted bids. The consultancy services also included construction management and assistance to Project Manager (PM), a departmental representative of DG MAP for supervision and documentation during the execution stage of Project. PM was responsible for execution of works as per drawings and specifications as well as for quality control checks, technical checks of bills for payment & maintenance of site documents.

## **Audit Findings**

### **2.1.2 Slow progress of Work**

As per the sanctions accorded by the Ministry in May 2002 and June 2008, the provision of married accommodation was to be made on four yearly basis. Phase I of the project was therefore to be completed by March 2006. Phase II of the project which was to be initiated within four years of Phase I, was delayed by two years and sanctioned in 2008. Phase II was to be completed by March 2012. With the completion of first two phases by March 2012, it was envisaged that 1,27,851 DUs would be ready for use by the Services. We however observed that as of March 2016*i.e.*, even after four years of the scheduled completion date of Phase II, only 80692 DUs (63 *per cent*) had been completed under the two Phases. The balance 47,159 DUs, were still under various stages of construction (March 2016). The combined Phase III and IV of the project, which should have ideally been sanctioned by 2010, is still under planning (March 2016). Hence, against the target of 1,98,881 DUs, which were to be constructed in four phases of four year each from 2002 onwards, only 80,692 DUs (41 *per cent*) were actually constructed under the

project MAP, during the 13 years so far. The Defence services personnel, as end users, therefore continued to remain partially deprived of the facility.

### **2.1.3 Assessment of deficiency**

The scope of the Project as approved by the Cabinet Committee on Security, in September 2002, was to take care of deficient married accommodation for Defence services personnel. Further, as per the Scales of Accommodation for Defence Services (SOA), the number of married quarters authorised at any station was to be determined on the basis of sanctioned strength of personnel and the authorised percentage fixed for each rank as laid down therein. The SOA however qualifies that the existence of a scale neither constitutes evidence of need nor is an authority for construction of new accommodation or for making improvements to the existing buildings. The requirement for a work service and its scope needs to be properly examined and justified before sanction is accorded by the competent financial authority. The SOA therefore emphasises that while authorisation is the maximum limit up to which number of DUs can be constructed, the need for examining the actual requirement, based on the men-in-position, should form a criteria for realistic assessment of the deficiency of DUs in view of the persistent deficiency of the officers in the Armed Forces. Hence the net deficiency should have been worked out with reference to the actual requirement since a large number of existing married quarters were also already lying vacant for a long period.

We came across instances wherein the requirement of DUs for construction under MAP had not been assessed on the basis of actual need by the Services and the accommodation constructed was either in excess of authorisation or beyond the laid down scope of MAP as discussed in the following paragraphs for the sample station:

#### ***2.1.3.1 Construction of 93 DUs despite continued availability of vacant quarters***

At Military Stations Bathinda, Mamun and New Amritsar Military Station (NAMS), the existing DUs for officers were already lying vacant for a long time. Despite this, the Apex Steering Committee approved the construction of additional DUs for Officers based on the sanctioned strength of the station, without considering the state of already vacant accommodation. As a result an additional accommodation for 93 officers costing ₹ 17.17 crore was constructed, which remained unutilised. The cases are described as follows;

#### **Case-I Military Station Bathinda**

At Military Station Bathinda, 484 DUs (260 Major and above +224 Captain) were available for officers (Captain and above) prior to MAP. Under phase I

of MAP, 341 DUs for officers (299 Major and above and 42 Captain) were constructed based on the requirement assessed by Station authorities, as per Key Location Plan (KLP)<sup>5</sup> Matrix. The construction of these DUs was completed in February 2009. We however, observed that even before the additional DUs under MAP were constructed, 48 existing captain quarters were lying vacant since 2008. Further, in the absence of any demand, 36 out of the 42 newly constructed Captain DUs were also re-appropriated from September 2010. Given the continued non-utilisation of 84 Captains quarters (48 old and 36 new), the construction of 42 quarters under MAP at the contracted cost of ₹ 5.71 crore was unwarranted.

### **Case-II Military Station Mamun**

Against the KLP authorisation of 398 DUs for Captains, 174 DUs already existed at Military station Mamun. Though there was a deficiency of 224 DUs against the KLP yet 25 of the 174 DUs held were already lying vacant in October 2006, with no waiting list. Despite the continued holding of vacant accommodation, 16 additional DUs for Captain were sanctioned by the Apex Steering Committee and constructed in June 2008 under MAP Phase-I at Mamun. We observed that as of June 2015, 48 DUs for Captain were lying vacant, which included nine for more than 10 years and 20 for more than five years. Further, 39 DUs had been re-appropriated for other than the married accommodation purposes. Hence, the construction of 16 additional DUs for Captains at an average contracted cost of ₹ 2.29 crore under MAP was not as per actual requirement of the station.

### **Case-III Military Station New Amritsar Military Station**

Construction of 35 DUs for Major & above at NAMS was sanctioned by Apex Steering Committee in December 2009 under MAP Phase-II. DGMAP concluded a contract for construction of these DUs in February 2011. However, after conclusion of contract, Station HQ NAMS intimated (June 2011) the Corps HQ that since 67 officers DUs (43 Captain and 24 Major & above) were already lying vacant and hence there was no further requirement for the station. It was, therefore, recommended by the Station HQ NAMS that the project for construction of married accommodation at the station be cancelled. We observed that incidentally the contract concluded for the project did not pick up and the contract was eventually cancelled at two *per cent* progress in March 2013 due to slow progress of work by the contractor. Despite the recommendation of the Station Commander (June 2011) for cancellation of their portion of work and the window for the same offered by the cancellation of the contract in March 2013, we found that the requirement

---

<sup>5</sup>KLP gives the list of formations, units, sub-units to be located in a station on permanent basis. Permanent accommodation for KLP units only can be constructed in a station.

of 35 DUs costing ₹ 9.17 crore was again included in the scope of risk and cost contract concluded by DGMAP in February 2014. This led to provisioning of surplus accommodation for Officers at the station.

We observed (June 2015) that 23 existing DUs for Major & above were lying vacant at NAMS for the last five years (June 2015) and therefore the possibility of usage of additional 35 DUs being constructed at a cost of ₹ 9.17 crore was remote. The position remains the same as of March 2016.

Ministry in its reply (July 2016) accepted the audit's contention in general but stated that issues such as less than expected inductions, the dynamic nature of deployment, present unpopular nature of some stations, which could alter in future besides long term requirement should be given consideration. It was however further stated that services will be advised to verify requirements with greater precision in future.

Audit is of the view that since the non-utilization of existing officers DUs was already well known, construction of new 93 DUs costing ₹17.17 crore could have been avoided or deferred till the demand improved.

### 2.1.3.2 Construction of DUs beyond the authorisation

The scope of the Project was only to construct deficit married accommodation for the Services. We however observed that at Faizabad and NAMS stations 85 DUs for Junior Commissioned Officers (JCOs) and 45 DUs for Other Ranks (ORs) were constructed in excess of the authorisation. Further at New Delhi station 533 DUs for Officers were constructed in excess of authorisation for the station. The total cost of these DUs constructed at the three stations at proportionate contract cost worked out to ₹ 155.08 crore. The details are summarised in **Table 14** below:

**Table –14: Summary showing DUs constructed in excess of authorisation**

Station	Category	Authorised strength as per KLP	Percentage authorisation	No. of DUs authorised	DUs Held	Deficiency/Surplus (5-6)	DUs constructed under MAP	Excess construction of DUs (8-7)
1	2	3	4	5	6	7	8	9
Faizabad	JCOs	253	75	190	114	76	98 (PH-II)	22
	ORs (ASC/AOC/AEC/EME)	2685	35	940	645	541	586(PH-II)	45
	Hav (AOC/ASC/AEC/EME)	57	100	57	1186			
	Hav (other)	539	35	189				

Station	Category	Authorised strength as per KLP	Percentage authorisation	No. of DUs authorised	DUs Held	Deficiency/Surplus (5-6)	DUs constructed under MAP	Excess construction of DUs (8-7)
1	2	3	4	5	6	7	8	9
NAMS	JCOs	501	75	376	316	60	60(PH-I) 63(PH-II) Total 123	63
New Delhi	Major and above	3175	100	3175	2418	757	890(PH-I) 400(PH-II) Total 1290	533

- At Faizabad, though the deficiency against KLP for JCOs and ORs was of 76 and 541 DUs, yet the ASC had sanctioned 98 and 586 DUs respectively under Phase II of MAP. Station Headquarter in response to the audit query about the excess provisioning stated that the surplus accommodation was due to inclusion of separate family accommodation, though the same was not recommended by the Board of Officers. Since provision of Separated family accommodation<sup>6</sup> was not covered in the approved scope of MAP, sanctioning of excess number of 22 DUs for JCOs and 45 DUs for ORs was not in order.
- Against the deficiency of 60DUs for JCOs at NAMS, 123 DUs were constructed under Phases I and II of MAP at the station. We observed that the Station HQ NAMS had also included ILP (Interim Location Plan<sup>7</sup>) units, while projecting the requirement, which resulted in excess provisioning. In reply Station HQ stated that the case for approval of ILP units in the KLP of the Station has been taken up with higher formation in August 2015. However, as no permanent accommodation can be constructed for ILP units in the station, provisioning for ILP units was not authorised.
- Allotment of accommodation for Defence Services officers, including Army, Navy and Air Force, at New Delhi is made from the Chief Administrative Officer (CAO) pool, which consist of accommodation from MES as well as CPWD. Against the authorisation of 3175 DUs (Major and above), 2418 DUs were held in the CAO pool, prior to introduction of MAP. This holding included 1930 DUs of MES and 488 DUs of Central Public Works Department. We observed that against the deficiency of 757 DUs, 890 DUs were constructed under MAP Phase-I resulting in a surplus of 133 DUs. Despite this surplus, another 400 DUs were sanctioned under MAP Phase-II in December 2009 thus resulting in an overall excess of 533 DUs, constructed at a cost of ₹ 129.98 crore.

<sup>6</sup>Separated family accommodation is provided at peace stations to the families of defence personnel posted in field area.

<sup>7</sup> ILP includes the list of formations, units; sub-units though not listed in KLP of the station but are physically located due to administrative/operational reasons for short duration. No permanent accommodation can be constructed for such units in the station.

Ministry in its reply (July 2016) admitted the audit contention as far as Faizabad Station is concerned & stated that the 66 excess DUs are being reduced from the scope of work through amendment to the contract.

- As far as excess construction of officers DUs at Delhi Station is concerned it was stated that the DUs constructed under MAP was based on over all deficiency of respective services and not against the deficiency of CAO Pool. But the same has not been contested with the actual authorisation as per Peace Establishment (PE) as against the authorised PE of 3175 brought out by Audit. Moreover, all the accommodations i.e 3708 DUs including 1290 constructed under MAP are under the disposal of CAO Pool only.

### ***2.1.3.3 Use of newly constructed DUs under MAP for other than intended purpose indicating improper assessment of the requirement of married accommodation***

Audit observed that instead of using the units constructed for married accommodation, a good number of DUs constructed under MAP were put to other than the intended use at various stations. Cases observed in a sample check are discussed below:

#### **(i) Conversion of accommodation constructed under MAP Phase-I**

57 DUs for Officers and 06 for ORs constructed under MAP Phase-I at Mamun, Yol, Danapur, Chennai and Bathinda were re-appropriated into single living accommodation. The period of re-appropriation for seven DUs for officers was more than three years. Similarly, 15 DUs for JCOs constructed in at Chennai were being used after being re-appropriated as Army Primary School since 2010.

#### **(ii) Conversion of Accommodation constructed under MAP Phase-II**

16 DUs for JCOs and 62 DUs for ORs constructed under Phase-II at a cost of ₹5.99 crore at Mamun and Bikaner stations were being used for single living accommodation, Bank, Unit Run Canteen, Cyber Cafe, complaint cell *etc.*

Ministry broadly admitted (July 2016) the above cases of re-appropriation stated that re-appropriation has arisen due to the combination of DUs remaining vacant on one hand on account of their being more than requirement and on other hand there being deficiency in other kinds of authorised accommodation at the stations. However, it was further emphasized by the Ministry that authority will be advised to undertake a comprehensive examination of all cases of re-appropriation and where not justified revert the same to its original use.

## **2.1.4 Execution of Works**

### ***2.1.4.1 Provision of mobilization advance at very low interest rate***

As per the conditions of the contract interest bearing Mobilization Advance up to 15 *per cent* of the contract value could be availed by the contractors, if they so desired. The interest on such advances was eight and ten *per cent*. When compared with the SBI Prime lending rate (PLR) of 14.75 *per cent*, these rates of interest formed an additional incentive to the contractors for effective mobilization of resources and timely completion of the work.

We observed that after conclusion of contracts major construction companies *viz.* Omaxe Infra Project Limited, Indu Projects Limited, Apex Encon Project Private Limited, DSC Limited, KRR Infra Project Limited, Dhoot Developers Limited, Supreme Infrastructure India Limited, Janapriya Engineers Syndicate Limited M/S Marg Ltd, Vishal Infra Structure Ltd and Mfar Construction Pvt Ltd did not take diligent interest in the execution of projects undertaken by them. These defaulting contractors, failed to progress the work even after taking the Mobilization Advance of ₹ 510.65 crore.

Ministry in its reply (July 2016) stated that basic purpose of the mobilisation advance is to extend financial assistance within the term of contract to the contractor to mobilise the man and material resources for timely and smooth take off of the project.

The Ministry also stated that the interest-bearing advance has been paid and subsequently recovered in accordance with the CVC guidelines after ensuring requisite safeguard. The reply is not acceptable as a proper safeguard mechanism was not in place under the terms of contract as per CVC guidelines issued in April 2007 which states that mobilization advance should preferably be given in instalments and subsequent instalment should be released after getting satisfactory utilization Certificate from the contractor for the earlier instalment. The absence of proper safeguard mechanism helped the contractors to avail the huge amount of mobilisation advance despite non-achievement of desired progress in the work. However, Audit will follow up on the Ministry's admission in its reply (July 2016) stating that further improvements in provisions for payment of mobilization advance was being contemplated in Phase-III.

### ***2.1.4.2 Non-Recovery of ₹ 1057.25 crore from the defaulting Contractors***

For execution of works related to construction of 69,976 DUs sanctioned under Phase II of MAP, DG MAP had concluded 62 contracts between March 2010 and December 2012. We however observed that 31 out the 62 contracts were cancelled between March 2012 and March 2016. Only six contracts were

fully completed, that too with delays. Cancellation of contracts was mainly due to slow progress of work by the contractors. The progress in the 10 of remaining 25 contracts was below 50 per cent.

Consequent upon the cancellation of 31 original contracts in respect of projects under Phase II of MAP, risk and cost contracts were concluded by DG MAP to complete the balance work. As per contract conditions the extra expenditure incurred on completion of left over work was to be recovered from the defaulting contractor. DG MAP however informed Audit that in all cases of cancellation the original contractors have invoked Arbitration against cancellation & these cases are under various stages of litigation. Further a sum of ₹1057.25 crore was due in respect of 22 contracts i.e. difference between the rates quoted by the original contractors and the risk and cost contractors to complete the balance work, whereas the amount in respect of nine cases was yet to be worked out (March 2016).

As far as matter of recovery from defaulting contractors is concerned, it was stated that Bank Guarantee Bond (BGB) of the contractors worth ₹140.38 crore have been encashed and the balance will be recovered as per law of the land. Ministry stated (July 2016) that recoveries are subject to judicial proceedings, which are being diligently pursued.

#### **2.1.4.3 Substandard construction**

Quality Assurance of all works was to be done by the PM and the Contractor. The PM and the Station Commanders were to monitor the quality of work being executed at the site.

Major problems of quality control especially leakage/seepage, efflorescence, defective sewage system, damaged transformers, termite infestation *etc* were noticed in the DUs constructed by various executing agencies at NAMS, Bathinda, Suratgarh, Bhopal, Shahjahanpur, Shillong, Ahmedabad, Jodhpur, Jaipur and Delhi. The executing agencies were not responsive towards rectification of the defects.

A few instances observed in audit of selected DUs are explained as under:

- 208 DUs for ORs were constructed under MAP Phase-I at Khetarpal Enclave at NAMS by CPWD in June 2011. Station HQ NAMS convened a meeting of the Board of Officers in March 2011 to take over the accommodation. Garrison Engineer (GE) NAMS however refused to take over the accommodation due to various defects in construction including leakage/seepage. The Station Headquarter however ignored the issues brought out by the Garrison Engineer and allotted the DUs directly to the users in November 2011 and February 2012.

In April 2015 Station HQ NAMS approached HQ 15 Infantry Div to direct MES to take over these 208 DUs on 'as is where is basis' and cover them under extensive repairs programme. GE NAMS, however, observed that even Sewage System constructed for these DUs was faulty leading to blockage and overflowing through manholes. In May 2015, GE NAMS estimated the cost of repairs at ₹ 1.35 crore to make the buildings habitable. However, the MES had not taken over these DUs from Central Public Works Department till March 2016.

DGMAP in its reply (April 2016) stated that DUs are in use and problems stated have not rendered them unusable. It was further stated that special repair has been proposed after usage of DUs for four years and holding CPWD responsible at this stage will not be appropriate. The reply is not convincing because quality issues in the construction pointed out by the GE should have been got addressed by the executing agency.

- 2,222 DUs (138 Major & above, 248 JCOs and 1836 ORs) constructed by DG MAP under Phase-I at Lucknow were handed over to the MES between December 2008 and June 2012. After taking over the accommodation, extensive leakage/seepage was noticed in DUs constructed in seven pockets. However, these defects could not be got rectified by the contractor during the defect liability period of *two years*. The GE Lucknow intimated (June 2015) that 953 DUs were having the problems of leakage/seepage had prepared an estimate of ₹ 3.15 crore for rectification of these defects. The work is yet to be sanctioned (March-2016) and the issue is being addressed through normal day to day maintenance works by the MES.

DGMAP in its reply stated that all the defects noticed during the handing/taking over were notified to the contractor during the defect liability period and all defects were rectified to the satisfaction of the users. The reply is however not tenable as the GE has proposed an estimate of ₹3.15 crore for rectification of leakage/seepage.

Ministry in its reply (July 2016) stated that DGMAP has been advised to take more concerted action on quality aspects in both ongoing as well as future works.

### **2.1.5 Under-deployment of manpower by consultant contractors**

DG MAP concluded a number of contracts for consultancy *viz.* Detailed Engineering & Project Management Consultant (DEPMC) at various stations for preparing tender documents, evaluating the tenders, submitting its recommendations to DG MAP for final approval for conclusion and execution of contracts. These consultancy contracts are concluded at a fixed percentage,

ranging from 1.5 to 2.5 *per cent*, of the total project cost. The consultant contractors are required to deploy such number of Engineers as specified in the contract for project management. In case of non-deployment of the stipulated manpower, recovery was to be made from DEPMC contractor at the monthly rates mentioned in the contract agreement.

Examination of the records of concerned PMs at various stations revealed that the DEPMC contractors had not deployed the full complement of manpower as required under the provisions of the contract for project management. As a result not only was the purpose of engaging these contractors defeated but the recovery for the under deployed staff was not also not fully made. Recovery of ₹27.76 lakh was outstanding at the following stations on this account;

**Table-15: Outstanding recovery from DEPMC contractors (March 2016)**

Sl.No	Station	Name of the contractor	Amount (₹ in lakh)
1	Amritsar	Wadia Techno-Engg Services Ltd	7.50
2	Faizabad	GPM_ ACID JV	7.48
3	Agra	Hospitech Management Consultant Pvt Ltd	12.78
	Total		27.76

In reply Ministry stated that depletion in deployment of manpower by the DEPDCs was mainly due to slow progress of work at site by the building contractors or suspension of work. Notwithstanding the reasons, the recovery on account of under deployment had to be made from the running account payments made to the contractors. A recovery of ₹ 15.72 lakh is stated to have been made so far from the two contractors at Amritsar and Agra.

### Conclusions

In order to meet the critical shortages in the married accommodation of defence services personnel, DG MAP was created, as a special organisation, with a clear cut task to meet the construction targets expeditiously and in a time bound manner. DG MAP has only met 41 *per cent* of the targets in the 14 years period. Against the target of 1,98,881 DUs, to be constructed in four phases of four year each from 2002 onwards i.e. up to 2018, only 80,692 DUs have been constructed so far (March 2016). This led to non-fulfilment of accommodation needs of the defence personnel to that extent. Besides, there were instances of construction of DUs despite availability of vacant quarters at the station, inaccurate assessment of deficiency, construction of accommodation beyond authorisation and undue benefit to contractors by release of mobilization advance without utilization certificates for earlier releases.

## Recommendations

- ❖ Actual posted strength of Officers in the Armed Forces and the position of vacancy of DUs should be taken into account while assessing the requirement of DUs instead of purely assessing on the basis of authorised strength besides taking into cognizance of the status of waiting list for the married quarters at the station. The requirement of DUs at various stations for Phase-III & IV may be reassessed on realistic basis as these phases are yet to start.
- ❖ Ministry may consider a reasonable increase in Performance Security amount from the contractor to act as a deterrent for the defaulting contractors. Further, the mobilization advance may be given in instalments and subsequent instalments may be released only after getting satisfactory utilisation certificate from the contractor for the previous instalment and verification of the same. All the defaulting contractors involved in the work related to MAP may be debarred from taking further contracts/works.
- ❖ A suitable mechanism to ensure monitoring and timely rectification of quality issues during construction of DUs should be put in place.

## 2.2 Loss in procurement of Jelly Filled Cable

**Lack of clear direction from Director General Quality Assurance (DGQA) regarding conduct of the tests for which they do not have their own facility led to inordinate delay of 15 months in completion of evaluation of Jelly Filled Cables. As a result, commercial offer was revised by the vendor culminating in loss of ₹1.28 crore to the Government in procurement of 3000 Km Jelly Filled Cable.**

Time frame given in Defence Procurement Procedure stipulates a period of six to twelve months for trials of weapons and equipment under capital procurement. Further, as per the directives issued by Army HQ (November 2008) for the trials of Jelly Filled Cable, users trials and evaluations were not to exceed 30 days under normal circumstances.

We noticed that despite the above directives, undue delay in completion of trials and evaluation by Army HQ led to revision of commercial offer by the vendor resulting in loss to the Government in procurement of Jelly Filled Cable (JFC). The case is discussed in succeeding paragraphs:

Army HQ initiated a case (April 2006) for procurement of 3000 Km Jelly Filled Cable (JFC) along with accessories at an estimated cost of ₹21.00 crore to meet the operational requirement of the Army. Acceptance of Necessity (AON) for the same was accorded by the Ministry in August 2006 and techno-commercial offer was issued in March 2008. In technical evaluation (October 2008), JFC offered by two vendors viz. M/s Ordnance Cable Factory (OCF), Chandigarh and M/s Pair cables, Bangalore were found compliant and were recommended for trials.

The trials were to be conducted in two phases (a) User trials and (b) Controllerate of Quality Assurance (Electronics) (CQAL) Evaluation. User trials were completed by August 2009 and CQAL evaluation by March 2010. Though both the vendors were found successful in users' trial, cable of OCF, Chandigarh was not found compliant in Oxidation Induction Test (OIT)<sup>8</sup>. However, during staff evaluation (November 2010), it was decided to conduct OIT for both the vendors at a common laboratory. Accordingly, in February 2011, it was decided by Director General Quality Assurance (DGQA) to conduct the OIT at Component Approval Centre for Telecommunication (CACT), Bangalore in which OCF, Chandigarh didn't participate and thus, declared non-compliant. OIT was completed in March 2011 at CACT, Bangalore and JFC submitted by M/s Pair Cables passed the test.

Meanwhile, commercial offers of the vendors which were valid for 18 month from the date of opening of bid (June 2008) expired in December 2009 and vendors were asked to extend the same up to December, 2010 or submit fresh commercial offer with validity up to December 2010. In response, OCF extended the commercial offer up to December 2010 whereas M/s Pair cables submitted their revised commercial offer (₹48.70 crore) with validity up to December 2010 which was further extended up to March 2011. As the staff evaluation was yet to be completed (March 2011), M/s Pair cable Ltd again revised their commercial quote to ₹57.47 crore, with validity up to March 2012.

Subsequent to completion of staff evaluation in October 2011, Commercial Negotiation Committee (CNC) finalised the total price as ₹ 49.98 crore which was approved by CFA in March 2012. Accordingly, a contract was concluded with M/s Pair Cables (March 2012) at a total cost of ₹ 49.98 crore for supply of 3000 km JFC.

Audit scrutiny of the case revealed that CQAL did not have facility for some tests including OIT. These tests were conducted in two different private laboratories. JFC offered by M/s Pair cables, Bangalore was tested at M/s UM

---

<sup>8</sup>In OIT, which was the part of CQAL evaluation, the life of insulation of the outer sheath as well as the inner legs of JFC was tested.

Cable Ltd Silvassa (May 2009) and that of OCF Chandigarh was tested at Sri Ram Institute of Industrial Research, New Delhi (February- March 2010). As JFC of OCF, Chandigarh was declared unsuccessful in OIT, OCF did not agree with the result and requested for conduct of OIT at another laboratory viz. Central Institute of Plastic Engg and Technology (CIPET), Hyderabad which was not accepted by DGQA. However, as discussed above, with a view to provide level playing field to both the vendors, during staff evaluation it was decided to conduct the test at CACT, Bangalore.

To an Audit query seeking reasons for conducting the test at CACT and not at CIPET as requested by the OCF, DGQA stated that CACT was accredited by NABL where as CIPET did not have the accreditation. We, however, found that the two private laboratories where the tests were conducted earlier also did not have NABL accreditation. DGQA further stated (September 2016) that vendors were asked to produce results for the tests for which facilities were not available at CQAL. The vendors chose the lab on their own to conduct the test and DGQA representatives were detailed to witness the test.

Evidently, a clear direction regarding conduct of the tests for which DGQA do not have their own facility was not in place. Lack of direction by DGQA for such trials led to delay of more than 15 months in completion of trials and evaluation. As a result, commercial offer, which was valid up to December 2010, was further revised by the vendor which culminated into loss of ₹1.28 crore to the Government.

The case was referred to the Ministry (October 2016), their reply was awaited (January 2017).

### **2.3 Overhauling and procurement of microlite aircraft**

**In deviation from the extant policy, 34 engines of existing microlite aircraft were contracted for overhaul at a cost exceeding 50 per cent of the cost of a new engine by the Director General, National Cadet Corps (DG NCC). Further, additional 110 microlite aircrafts were procured at a cost of ₹52.91crore despite low utilisation of the existing fleet.**

The mandate of the Air Wing of National Cadet Corps (NCC) is to impart flying training to create aviation consciousness among the cadets. The training is imparted through gliders/microlites (MLs) aircraft authorized for the purpose. Responsibility for maintenance and overhauling of the microlites (MLs) aircraft rests with the DG, NCC, who had reiterated (August 2008) to the central aviation support depot (CASD) that Cat 'D' items whose repair cost exceeds 50 per cent of cost of the equipment may be declared beyond economical repair (BER).

Audit noticed (September 2016) that DG NCC solicited quotation (February 2012) from M/s Varman Aviation Private Ltd (VAPL) on PAC<sup>9</sup> basis for overhaul of 34 engines (of microlite aircraft) which were due for overhaul as per their calendar life in September 2013. The price was negotiated (March 2013) to ₹7,96,041/engine, which was more than 50 *per cent* of the cost of a new engine *i.e.* ₹15.84 lakh. DG NCC approached (April 2013) Ministry of Defence (MoD) for 'in principle' approval, which was accorded (November 2013). However, offer of M/s VAPL had expired in June 2013.

The overhaul price of ₹8,60,585/engine negotiated (April 2014) under the revised offer (January 2014) of M/s VAPL, was higher by ₹64,544/engine vis-à-vis the previous price of March 2013. Overhaul order for 34 engines was placed on M/s VAPL in October 2014 with completion scheduled by August 2015. However, four of the engines were yet (September 2016) to be overhauled.

Audit further noticed that between 2011-12 to 2014-15, 45 MLs were utilised for 7,028 hours (19.5 *per cent*) of flying training against the required 36,000 hours (45 ML x 4 years x 200 hours). In spite of low utilisation of the existing fleet, DG NCC projected requirement to the Ministry of additional 110 MLs for 48 NCC squadrons as per authorisation of four MLs/gliders for each squadron as they were holding 82 MLs/gliders. The requirement of deficient 110 MLs was accepted in Annual Provisioning Review (APR) Committee of MoD. Accordingly, the Ministry contracted (October 2015) for 110 MLs<sup>10</sup> for DG NCC at Euro 70,25,984.44 (₹52.91 crore) with delivery between 12 to 48 months.

Audit thus observed (September 2016) that keeping in view less utilisation (19.5 *per cent*) of existing MLs, procurement of additional 110 MLs at ₹52.91 crore lacked justification.

Audit also observed (September 2016) that overhauling of 34 engines instead of declaring them beyond economical repair, was in deviation from the extant policy on repair of Cat 'D' items as reiterated by the DG NCC, itself, besides resulting in extra expenditure of ₹21.94 lakh (₹64544 x 34 nos.)

In reply, DG NCC stated (October 2016) that shortfall in flying activity was due to accident of one ML on 06 October 2013 which was resume only on 02 December 2014 after conclusion of Court of Inquiry. Further, the reply of DG NCC was silent on overhaul of engines in deviation from the extant policy and extra expenditure of ₹21.94 lakh.

---

<sup>9</sup> PAC: Proprietary Article Certificate

<sup>10</sup> 14 Microlite aircraft have been received by the DG NCC as on 27 February 2017 (DG NCC's letter No.7153/AO/Gen/DGNCC/LGS(Air)/120 dated 27.02.2017)

The reply is not agreed to as even after discounting the period as stated by DG NCC during which there was no flying, utilisation of microlite was 26 *per cent* only. Further, the fact of low utilisation of the existing fleet was not appraised to the competent authority while seeking approval for procurement of additional 110 MLs costing ₹52.91 crore, which thus lacks rationale.

The matter had been referred to the Ministry in October 2016; their reply was awaited (January 2017).